



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,609	07/19/2006	Akihiko Fujii	293709US0PCT	5969
22850	7590	12/12/2011		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.			EXAMINER	
1940 DUKE STREET			KING, FELICIA C	
ALEXANDRIA, VA 22314			ART UNIT	PAPER NUMBER
			1789	
NOTIFICATION DATE	DELIVERY MODE			
12/12/2011	ELECTRONIC			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

1                   RECORD OF ORAL HEARING  
2                   UNITED STATES PATENT AND TRADEMARK OFFICE  
3

---

4                   BEFORE THE BOARD OF PATENT APPEALS  
5                   AND INTERFERENCES  
6

---

7                   *Ex Parte AKIHIKO FUJII, ATSUSHI SUZUKI, HIDEO OOMINAMI,  
8                   RYUJI OCHIAI, and YUSUKE SHIBUYA*

---

9  
10                  Appeal 2011-001377  
11                  Application 10/586,609  
12                  Technology Center 1700

---

13                  Oral Hearing Held: November 8, 2011  
14

---

15                  Before BRADLEY R. GARRIS, TERRY J. OWENS, and  
16                  KAREN M. HASTINGS, *Administrative Patent Judges.*

17                  APPEARANCES:

18                  ON BEHALF OF THE APPELLANT:

19                  VINCENT E. SHIER, ESQUIRE  
20                  Oblon, Spivak, McClelland, Maier & Neustadt, L.L.P.  
21                  1940 Duke Street  
22                  Alexandria, Virginia 22314

23                  The above-entitled matter came on for hearing on Tuesday,  
24                  November 8, 2011, commencing at 9:54 a.m., at the U.S. Patent and  
25                  Trademark Office, 600 Dulany Street, Alexandria, Virginia, before Victor  
26                  Lindsay, a Notary Public.

P R O C E E D I N G S

1           THE USHER: Calendar No. 9, Appeal No. 2011-001377, Mr. Shier.

2           JUDGE GARRIS: Thank you.

3           THE USHER: Um-hmm.

4           JUDGE GARRIS: Good morning, Mr. Shier.

5           MR. SHIER: Good morning.

6           JUDGE GARRIS: We understand we will be hearing two appeals  
7 from you today in related cases.

8           MR. SHIER: That's correct.

9           JUDGE GARRIS: And we will begin first with the 1377. As you  
10 know, you have about 20 minutes to present your argument for this case.  
11 When you're done, we will then give our Reporter an opportunity to switch  
12 tapes for the other transcript for the related appeal.

13           MR. SHIER: Okay.

14           JUDGE GARRIS: Okay. You may begin when you're ready, sir.

15           MR. SHIER: If I may ask, the serial number on the first case you'd  
16 like to discuss is the 609?

17           JUDGE GARRIS: It's 10/586,609.

18           MR. SHIER: 609, okay, thank you. Are we ready?

19           JUDGE GARRIS: Please begin.

20           MR. SHIER: Okay. Well, I thank you, first of all, for the opportunity  
21 to come before you and discuss this case today. And if it may please the  
22 Board, I will discuss the 609 first. And what I first want to do, though, is  
23 just explain sort of the background of the invention before we discuss the  
24 issues. And it can be very simply pointed out from our background that  
25

26

1 prior to this invention the coffee compositions that had previously existed  
2 had hypotensive activities or properties, despite having chlorogenic acids,  
3 which are known to have hypertensive activities.

4 In fact, we've pointed that out in paragraph 4 of the PG publication  
5 that this fact is well known and well documented, that chlorogenic acid is a  
6 known hypertensive agent. I'm sorry. I had them reversed, a hypotensive  
7 agent. But despite its presence in coffee, coffee itself increases the blood  
8 pressure, hypertensive-causing. We cited a reference, a European nonpatent  
9 literature document. And in fact, one of the documents cited by the  
10 Examiner, Suzuki, specifically points to coffee as having hypertensive  
11 properties, in paragraph 33 of the Suzuki reference.

12 So what the inventors of this application were able to identify is the  
13 adverse effects. The hypertensive effects are a result of the  
14 hydroxyhydroquinone content, what we will call the HHQ, and that by  
15 maintaining the chlorogenic acid contents at certain levels, you could  
16 preserve the hypotensive benefits of these compounds. And the way you  
17 would achieve that is by decreasing the content of the HHQ that's present in  
18 the coffee composition relative to the chlorogenic acids.

19 Prior to this invention, the influential and important role of HHQ was  
20 not known, was not disclosed. And in fact, none of the references cited by  
21 the Examiner in this case make any reference to the presence of HHQ, its  
22 role in the hypo or hypertensive properties of the coffee composition itself,  
23 how it impacts chlorogenic acid, and certainly nothing is disclosed in any of  
24 these references as to what the critical parameters would be. What are those  
25 threshold limits?

26

1        So in this case, what it ultimately revolves around, and as the brief has  
2 clearly articulated, they're just different claims. Each -- we have  
3 independent arguments, with respect to they're not to be treated as a single  
4 group.

5        However, we could point to some common properties that the art just  
6 completely is lacking, and what those are is when we look at, for example,  
7 Claim 1 in the coffee composition, it requires a specific chlorogenic acid  
8 content, 0.1 to 1 weight percent. And at the same time, we need to maintain  
9 less than 0.1 weight percent of HHQ based on the content of chlorogenic  
10 acids.

11       Now, the Examiner's case, what the Examiner cites to is a  
12 combination of references, Slaga, Stelkens, and Sosuke. The Slaga  
13 reference is just simply cited for the purpose of saying that coffee  
14 compositions were known to have a certain chlorogenic acid content within  
15 our range. However, what that reference relates to is just simply blending of  
16 beans and grinding. There's no reference to the HHQ content. And in fact,  
17 the HHQ content would be inherently over the threshold limitations.

18       The Examiner cites to Stelkens and says, well, you would have treated  
19 coffee with an activated carbon and, as a result, you would get diminished  
20 HHQ content. Well, the problem there is that Stelkens does not in any way,  
21 shape or form recognize HHQ, doesn't call out HHQ, doesn't tell you how  
22 that would be decreased, what its role is and what levels you would ever  
23 want to achieve and what benefits you would get from it. In fact, what  
24 Stelkens is more concerned about is caffeine content and nitrogenous  
25 compounds. Well --

26

1           JUDGE OWENS: The Examiner says -- on page 11 of the Answer,  
2 paragraph 12, "Examiner maintains that it is not a far stretch to refer to HHQ  
3 as a poisonous substance and that it has toxic effects on the body, such as the  
4 cleavage of DNA strands." Is that wrong?

5           MR. SHIER: There's no evidence that's been provided to support that.  
6           JUDGE OWENS: Is it wrong?

7           MR. SHIER: Is it wrong that HHQ would give rise to DNA or  
8 potentially DNA cleavage?

9           JUDGE OWENS: Yes.

10          MR. SHIER: I have no references to say that it is wrong or right. Do  
11 I know personally the answer to that?

12          JUDGE OWENS: Yes.

13          MR. SHIER: Not that I want to go on record to say because I have  
14 not received any documents to that effect in this case.

15          JUDGE OWENS: So you don't know whether it's true or not?

16          MR. SHIER: No. But even if it were true, and we can assume -- just  
17 for sake of discussion, let's assume that it is true, that that statement were  
18 true, it doesn't change the fact that Stelkens himself makes no reference to  
19 what is being diminished by treatment of activated carbon. And so, you  
20 could not look at this reference and say, well, that's motivation to decrease  
21 HHQ.

22          There's lots of things that could be considered poisonous. Water itself  
23 when taken in a sufficiently high dosage can lead to water toxicity.  
24 Wouldn't that be a poisonous substance? At least to some effect, my point is  
25 that the reference, Stelkens, doesn't recognize any particular compound  
26

1 other than caffeine that it's intending to decrease, and nitrogenous  
2 compounds, of which HHQ is not. So what this reference fails to do is  
3 appreciate even the problem that's trying to be solved. I mean, this is --  
4 process-type territory, as well.

5 JUDGE OWENS: The Examiner's argument is that in view of  
6 Stelkens it would have been obvious to reduce all poisons, including HHQ,  
7 such that it doesn't cleave DNA strands.

8 MR. SHIER: To what extent? And that's not what the reference says.  
9 I mean, we can't ignore the fact that Stelkens doesn't actually say that, nor  
10 does it say with respect to HHQ that in any way, shape or form that would  
11 be a poisonous compound that we want to diminish.

12 JUDGE OWENS: But that's not the Examiner's argument.

13 MR. SHIER: The Examiner's argument's incorrect for the very  
14 reasons we're stating here. And even if it were -- even if we were to take  
15 that there is a generic motivation to decrease any and all compounds that  
16 would be considered poisonous, regardless of what they are and what their  
17 characteristics are, there's no expectation that you would decrease HHQ.  
18 There's no evidence in this reference to what it would go down to. And in  
19 fact, we're the ones who came in with that evidence. We showed -- in one of  
20 our declarations in particular, we cite to the April 29th, 2009 declaration, in  
21 where we put forth a direct comparison, what Stelkens does, in Example 1.  
22 And we show, despite the presence of the chlorogenic acid content in  
23 Example 1 that would fall within the range recited in the claims, the HHQ  
24 content, relative to chlorogenic acids is not. It's quite higher. It's two and a  
25  
26

1 half times above the threshold for our particular composition. All right, the  
2 ultimate result there is 0.24 weight percent, relative to chlorogenic acids.

3 All right, so even if you look at this reference, what it's telling you is,  
4 okay, maybe I can use their method and I would decrease this. And that's a  
5 direct comparison to closest example and it's showing you, you still don't get  
6 to our concentrations.

7 So the next question is, would there be any reason to further modify it,  
8 any reason we would take it any further than what Stelkens has directed?

9 Well, there's no evidence here that HHQ is a recognized results-effective  
10 variable. Certainly, there's no motivation in Stelkens or in the Slaga, or even  
11 looking at the Suzuki reference which is used for different activated carbon.  
12 None of these disclose the role of HHQ, its importance, why we want to  
13 diminish it, to what level. And our examples in our own specification  
14 clearly illustrate the benefits of preserving this ratio. And I could cite for  
15 that to Example 3, as well as several others.

16 Ultimately, what we get back down to is this is sort of an -- process-  
17 type case. Nobody recognized the problem to be solved, much less offered  
18 any solution to it. And even if they had, we've clearly provided the evidence  
19 to show why the art itself fails to get you to what the critical limitations to  
20 the claims are.

21 JUDGE OWENS: The Examiner's argument is that it would have  
22 been obvious to continue adsorbing HHQ, until you get it down as low as  
23 you possibly can, to avoid cleavage of DNA strands to the maximum extent  
24 possible.

25

26

1           MR. SHIER: Based on what? There's no suggestion in the art to  
2 support that. And in fact, even if there were a suggestion that we might want  
3 to change something, the evidence of record clearly rebuts this case by  
4 showing the evidence of the unexpected result, which is increasing the  
5 ultimate benefits of the coffee composition as to the chlorogenic acid  
6 abilities. Absent our invention, you never would have known what that  
7 critical limitation was, which is the HHQ-to-chlorogenic acid ratio.

8           JUDGE OWENS: The Examiner's argument is that if you reduced  
9 HHQ to zero, to reduce cleavage of DNA strands to the maximum extent  
10 possible, you'd get that benefit and all other benefits of having zero HHQ.

11          MR. SHIER: But first of all, there's direct relationship and no  
12 evidence to show how decreasing DNA cleavage would impact the  
13 hypotensive effects. Now even if it -- and even looking beyond that, again,  
14 there's no direction in these references. None of the references provide you  
15 anything with respect to the HHQ, its role and how it affects.

16          JUDGE OWENS: You're not addressing the Examiner's argument.

17          MR. SHIER: I beg to differ. I think that we are. I mean, the  
18 Examiner's argument finds no basis in the references. And even if it did, the  
19 suggestion is solely a *prima facie* motivation to make certain changes.

20          The evidence in this case is overwhelming. The evidence in this case  
21 clearly shows, as compared directly to Stelkens, as directly compared to  
22 Suzuki, as compared to Stelkens and modified to use the carbon of Sosuke,  
23 you still do not achieve the levels that we have. And absent something  
24 outside of these references, there's no motivation.

25  
26

1        There's no recognition that HHQ has any role. It's an unexpected  
2 result. It's a property that would not have been recognized. It's not even  
3 suggested in these references. And I think that does address the question,  
4 and the major issue in this case.

5        JUDGE GARRIS: Judge Owens, further questions? Judge Hastings?

6        I think we're about done with this particular appeal. Let me ask our  
7 Reporter, do you have any questions?

8        THE REPORTER: No questions, sir.

9        JUDGE GARRIS: We will just take a short break. Please stay here.  
10        (Whereupon, the proceedings, at 10:06 a.m., were concluded.)

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

1                   C E R T I F I C A T E

2                   This is to certify that the attached proceedings before the U.S.

3 Patent and Trademark Office in the matter of:

4         *Ex Parte AKIHIKO FUJII, ATSUSHI SUZUKI, HIDEO OOMINAMI,*

5                   RYUJI OCHIAI, YUSUKE SHIBUYA, et al.

6                   APPEAL #2011-001377

7 PLACE: Alexandria, Virginia

8 DATE: November 8, 2011

9 were held as herein appears, and that this is the original transcript thereof.

10

---

11                   VICTOR LINDSAY, Reporter  
12                   FREE STATE REPORTING, INC.

13

14

15

16

17

18

19

20

21

22

23

24

25

26